



## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/809,408	03/15/2001	Jennifer Anne Dervin	IBM / 181	3577
7590 07/21/2004		EXAMINER		
Scott A. Sinebruner			CAO, CHUN	
Wood, Herron & Evans, L.L.P. 2700 Carew Tower 441 Vine Street Cincinnati, OH 45202-2917			ART UNIT	PAPER NUMBER
			2115 DATE MAILED: 07/21/2004	. 7

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Summany	09/809,408	DERVIN ET AL.				
Office Action Summary	Examiner	Art Unit				
	Chun Cao	2115				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period was reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	ely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 17 Ma	ay 2004.					
	action is non-final.					
3) Since this application is in condition for allowan						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) ⊠ Claim(s) <u>1-38</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ⊠ Claim(s) <u>5,14,16,23 and 25-28</u> is/are allowed. 6) ⊠ Claim(s) <u>1-4,6,7,12,13,15,17-22,24,29,30 and 3</u> 7) ⊠ Claim(s) <u>8-11 and 31</u> is/are objected to. 8) □ Claim(s) are subject to restriction and/or	32-38 is/are rejected.					
Application Papers						
9)☐ The specification is objected to by the Examiner	r.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents</li> <li>2. Certified copies of the priority documents</li> <li>3. Copies of the certified copies of the priori application from the International Bureau</li> <li>* See the attached detailed Office action for a list of</li> </ul>	s have been received. s have been received in Application ity documents have been receive (PCT Rule 17.2(a)).	on No d in this National Stage				
Attachment(s)						
1) Notice of References Cited (PTO-892)	1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)					
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date 3.4.</li> </ul>	Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:					

Application/Control Number: 09/809,408

Art Unit: 2115

## **DETAILED ACTION**

- 1. Claims 1-38 are presented for examination.
- 2. The text of those applicable section of Title 35, U.S. Code not included in this action can be found in the prior Office Action.
- 3. Claims 1-4, 6, 7, 12, 15, 17-22, 24, 29, 30 and 32-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Westwick et al. (Westwick), US patent no. 5,828, 836 in view of Fuchs et al. (Fuchs), US patent no, 5,590,277.

As per claim 1, Westwick teaches a method of restarting a node in a clustered computer system [fig. 1], wherein the clustered computer system hosts a group including first and second members that reside respectively on first and second nodes [fig. 1; col. 3, lines 49-57], the method comprising:

in response to a stop control message on the first node [controller 14A, fig. 1], notifying the second member of the group using the first member; and in response to the notification, initiating a restart of the first node using the second member [the host processor] [col. 6, lines 60-65; col. 7, lines 1-11].

Westwick does not specifically teach of detecting a clustering failure on the first node. However, as shown by Fuchs it is notoriously well known in the art to detect a clustering failure on the first node in order to provide a control message [col. 13, lines 10-15]. It would have been obvious to one of ordinary skill in the art to use the well known feature such as detecting a cluster failure to provide a control signal to the second member (the host processor). Therefore, the second member may initiate a restart of the first node in response the clustered failure.

Application/Control Number: 09/809,408

Art Unit: 2115

As per claim 2, Fuchs teaches the group comprises a cluster control group [col. 13, lines 11-12] that includes a member on each node participating in clustering in the clustered computer system [col. 13, lines 3-4], and wherein the first and second members are each members of the cluster control group [col. 13, lines 3-4].

As per claim 3, Westwick teaches of notifying the second member comprises issuing a membership change request to the group using the first member [col. 7, lines 1-11].

As per claim 4, Westwick teaches of issuing the membership change request includes indicating in association with the membership change request that the membership change request is for the purpose of restarting the first node [col. 7, lines 1-11].

As per claim 6, Westwick teaches of initiating the restart includes issuing a start node request to the group using the second member [col. 7, line 1-11].

As per claim 7, Westwick teaches of issuing the start node request includes indicating in association with the start node request that the start node request is for the purpose of restarting the first node [col. 7, lines 1-11].

As per claim 12, Westwick teaches of terminating clustering on the first node after notifying the second member of the group using the first member [col. 7, lines 1-11].

As per claim 15 recites the method which is the combination of methods as claims 1-4 and 6-7, therefore, it is rejected accordingly based on the rejection of claims 1-4 and 6-7.

Page 4

Application/Control Number: 09/809,408

Art Unit: 2115

As to claims 17-22, 24, 29, 30, 32 and 33, Westwick and Fuchs together teach the claimed method of steps. Therefore, Westwick and Fuchs together teach the claimed apparatus and system to carry out the method of steps.

As to claims 34-38, Westwick and Fuchs together teach the claimed method of steps. Therefore, Westwick and Fuchs together teach the claimed program product to carry out the method of steps.

4. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Westwick et al. (Westwick), US patent no. 5,828, 836 in view of Fuchs et al. (Fuchs), US patent no. 5,590,277 and Huang (Huang), US patent no. 5,748,882.

As per claim 13, Westwick and Fuchs do not explicitly teach of selecting the second member from a plurality of members in the group to initiate the restart the first node. However, Huang teaches of selecting the second member [col. 5, lines 13-14] from a plurality of members [col. 4, lines 66-67] in the group to initiate the restart the first node [col. 23, lines 60-64]. It would have been obvious to one of ordinary skill in the art at time the invention to combine the teachings of Westwick and Fuchs and Huang because the specify teachings of Huang stated above would improve the overall performance of Westwick system by allowing to select a particular member to restart the first node.

## Allowable Subject Matter

5. Claims 5, 14, 16, 23 and 25-28 are allowed over the prior art.

Application/Control Number: 09/809,408 Page 5

Art Unit: 2115

6. Claims 8-11, and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Applicant's arguments filed on 5/17/2004 have been fully considered but are moot in view of new ground(s) of rejection.

## Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun Cao at (703) 308-6106. The examiner can normally be reached on Monday-Friday from 7:30 am - 4:00 pm. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor Thomas Lee can be reached at (703) 305-9717. The fax number for this Art Unit is following: Official (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 306-5631.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

Art Unit: 2115

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chun Cao

July 14, 2004